Paul Young

SE110 Final Project - Egg Dodger

https://grayman701.github.io/finalProject/index.html

**Tay Robinson** completed code for the animation of the falling obstacles and added code from class for variables, and functions.

**Connor Bowling** designed the background

**Paul Young** designed the chicken / player

We used concepts from class to create a game where we have a chicken that has to avoid getting hit by falling eggs by moving left or right. If the chicken gets hit in center mass the game is over.

We start our code with getElementById and getContext to initialize the canvas and get a 2D drawing context.

Next we let the variables that will be used in our game. We used let x and y to determine a starting point for drawing the graphics for the player position.

**functions onkeydown and onkeyup;**

* detects if the key inside the “ “ , “a”, “d” “f” is pressed in a true false range. if onkeydown is true: a= left, d=right, f=restart/reload page, space bar = jump.

**function drawBackground:**

* fills in the blue and green background rectangles for sky and ground and adds the sun.

**function drawPlayer:**

* starts at coordinates x, y
* draws various parts of the chicken / player

**function drawObstacle:**

* creates the size and color of the falling egg – white & 20x20
* the obstacle is created in a random column and falls to the bottom of the screen

**function updatePlayerPosition:**

* Updates player position based on gravity and movement.
* This creates the parameters for the player for it to move smoothly across the screen and be able to move from all the right and come back on the left side of the screen and vice versa.

**updateObstacle:**

* Moves the obstacle down and resets it when it goes off-screen.

**function Hit:**

* Checks if the player/chicken collides with the obstacle and sets gameOver to true if there’s a collision.

**drawFrame**:

* Main game loop that updates positions, checks collisions, and draws the game elements. It also displays a "Game Over" message when the game ends.